CLAIMS

What is claimed is:

1. A method for evaluating an organizations institutional risk comprising the steps of:

a) acquiring data with respect to a manufacturing system;

b) calculating location availabilities for manufacturing;

c) calculating constrained availabilities due to production limitations;

d) calculating forecasted and actual production of components;

e) assessing the production mix for a production facility;

f) calculating , the forecast contribution margin for all of the assembly plants is calculated;

g) calculating the actual contribution margin for each assembly plant under a business interruption loss ; and

h) conducting an evaluation as to proper loss risks measures.

2. The method according to claim 1 wherein acquiring data is acquiring data on one of a manufacturing site inside the organization, a manufacturing site outside the organization.

3. The method according to claim 1 wherein acquiring data is acquiring data from one of a rail line or port of entry for components.

4. The method according to claim 1 wherein calculating location availabilities for manufacturing is calculating excess capacity.

5. The method according to claim 1 wherein calculating location availabilities for manufacturing is calculating the carrying cost of excess capacity.

6. The method according to claim 1 wherein calculating location availabilities for manufacturing is one of calculating the cost to mitigate risks by the purchasing of insurance and calculating the cost to mitigate risks by using multiple component suppliers.

7. The method according to claim 1 wherein calculating actual contribution margin for each assembly plant is one of calculating actual contribution margin for each assembly plant with no business resumption or calculating actual contribution margin for each assembly plant with no mitigation effort.

8. The method according to claim 1 wherein conducting an evaluation as to proper loss risks measures is conducting an evaluation as to one of contribution margin lost, total vehicles lost, and total number of sites impacted.

9. The method according to claim 1 further including the step of:

i) rating property locations based on the a proper loss risks measures.

10. A quantitative property loss risk model and decision framework for use to study an organization's business interruption risk, the quantitative property loss risk model and decision framework comprising:

a risk process model;

an operations model that captures the interconnected nature of the enterprise; and

metrics for business interruption risks, wherein the risk process model measures risk changes by obtaining a probability distribution on contribution margin.

11. The system according to claim 10 wherein the risk process model is based on one of statistical data, information, and expert opinion.

12. The system according to claim 10 wherein the risk process model includes a subroutine which functions to provide one of proactive and reactive risk analysis.

13. The system according to claim 12 wherein the subroutine is configured to investigate proactive risk reduction options.

14. The system according to claim 12 wherein the subroutine is configured to investigat reactive risk reduction options.

15. The system according to claim 12 wherein the subroutine is configured to conduct "what-if" analysis.

16. The system according to claim 12 wherein the subroutine is configured to evaluate how strategic decisions may impact the overall corporate risk profile.

17. A method for evaluating an organization's enterprise risk comprising the steps of:

a) evaluating an organization's structure;

b) evaluating a contribution margin element within an organization; and

c) evaluating the effect on the organization of at least one event to an element within the organization.

18. The method according to claim 17 wherein evaluating an organization is evaluating an organization's manufacturing stream.

19. The method according to claim 17 further comprising the step of purchasing sufficient insurance to cover losses caused by a given risk.

20. The method according to claim 17 further comprising the step of taking steps to reduce threats to contribution margin.

21. The method according to claim 1 further comprising the step of conducting an stochastic risk analysis.